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Orthoplastics: Where are we going?

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Introduction

When the Lumiere brothers invented cinema, they stated that "the cinema is an invention without a future". This nihilistic forecast was based on the poor initial public reaction. History has proven them wrong. Could a similar fate be the case for orthoplastic surgery?

Despite good scientific surgical evidence [1,2], it seems that up-take of the orthoplastic principles, particularly for severe limb trauma, are far from being adopted world-wide. It remains common practice in orthopaedic units all over the world to treat open tibial fractures in a piecemeal way. Not only are the timelines for treatment not understood but soft tissue loss and restitution often under-played. Different types of dressings or long-term negative pressure wound therapy are often used. We have published [2] a recent study looking at the disparity between differing healthcare systems with respect to the treatment of severe lower limb trauma looking at both pathways and outcome measures. In this study the results achieved in a Centre set up in very austere conditions (Pakistan) but adhering to Ortho-plastic surgical principles was able to achieve improved outcomes of treatment of open tibia fractures when directly compared to a purely orthopaedic unit treating similar injuries but in a 'traditional' way but set in a healthcare system in a major hospital in Bologna (Italy).

Conclusion

The conclusions from that study should sound an alarm bell for surgeons directly managing such patients and for hospital directors facing health care provision, organization and financing. Orthoplastic surgery and related reconstructive microsurgery must be introduced into hospital policies for optimal treatment of specific areas of trauma and pathology. This is a logical, scientific and economic requirement, in the interest of patient and state finance in case of government-based health systems. Major multi-tissue limb trauma, hand, limb infection, joint contracture, orthopaedic oncology are only some example because research may show in the future more indications to a combined approach where bone, tendon, ligaments, joints biomechanics are approached simultaneously as soft tissue trophism, volumes and shapes, with advantage onto sequential multiple isolated specialistic treatments.

Why then all this skepticism on accepting orthoplastics?

Laziness to learn new skills? Limited knowledge on new standards of treatment? Fear to share patient care with colleagues? Fear to change organization schemes? Excess of pride by medics who are recalcitrant to share decisions and practice on patients, after decades of monocratic practice? Sharing knowledge, skills, activities, organization, responsibility between humans is a progress towards a more pragmatic and less individualistic vision, but requires intelligence and humility, an extraordinary as well as rare virtuous duet, even more if the purpose is restoring anatomy and function of a limb.

As the Lumieres noticed about cinema, big revolutions in human knowledge, technology, applied sciences are initially badly and slowly accepted. The modern Enlightenment period in the XVIII century showed that enlighted minds are those who lead any type of rational and proven improvement in our Society. They need to be listened to by colleagues who skeptically or lazily tend to preserve their routine of out of date practice, as change is the key to progress, when data show that change delivers better results.

Pioneering in orthoplastic surgery has to be acknowledged to world experts, among them Khan U [3,4], Levine LS [5], Tos P [6], Innocenti M [7]. These surgeons are either plastic surgeons with a privileged professional and human relation to an orthopaedic surgeon, or simultaneously plastic and orthopaedic surgeons, with an interdisciplinary expertise in the cross area between these two fields.

While medical knowledge and practical skills tend to overcome the rigid borders of traditional medical specialties, these are more and more to be considered starting points rather than arrival points, for the surgeon searching a career. The amount and detail of human knowledge and art progress, as well as the way these are categorized and organized and assigned to specific experts, within specific disciplines. With regard to this, rigidity is unacceptable, especially in a field where the final recipient is a patient. "Labels" of doctors are less important than their actual expertise and skills armamentarium.

In a patient-centered view, the orthoplastic approach is mandatory exactly as the monochord team of mechanics with different roles at the pit stop is an established event in Formula 1. Exactly with the same concept, we need to pursue a new perspective of working together and not subsequently, for the benefit of the patient, preventing tissue modifications and septic invasion in trauma or simply reducing the number of procedures and optimizing the benefits delivered with a joint comprehensive elective intervention in non-traumatic orthoplastic indications.

The roadmap to a wider acceptance, establishment and further development of orthoplastic surgery is the reinforcement of this young but already well proven concept, through education, motivation and support to young generations of plastic and orthopaedic surgeons, through high quality research on the clinical and cost/effective benefits of this joint approach and through an increasing spread of the results obtained with research and updated orthoplastic practice to peers and hospital directors.

References

1. Rymer B, Dimovska EOF, Chou DTS, Choa R, Davis B, et al. (2017) A representative assessment of the management of open fractures of the lower limb within UK orthoplastic centres: A two-centre audit of compliance with national standards. Injury injury [Epub ahead of print].
2. Boriani F, Ul Haq A, Baldini T, Urso R, Granchi D, et al. (2017) Orthoplastic surgical collaboration is required to optimise the treatment of severe limb injuries: A multi-centre, prospective cohort study. J Plast Reconstr Aesthet Surg 70(6): 715-722.
3. Khan U, Boriani F, Baldini N (2013) Orthoplastics: an evolving concept for integrated surgical care of complex limb trauma and abnormality. Plast Reconstr Surg 131(2): 313e-314e.
4. Khan U, Kelly MB, Pleat J, Chesse TJ (2011) Orthoplastics: an integral evolution within comprehensive trauma care. Injury 42(10): 969-971.
5. Heitmann C, Levin LS (2003) The orthoplastic approach for management of the severely traumatized foot and ankle. J Trauma 54(2): 379-390.
6. Leung CC, Ghanem AM, Tos P, Ionac M, Froschauer S, et al. (2013) Towards a global understanding and standardisation of education and training in microsurgery. Arch Plast Surg 40(4): 304-311.
7. Innocenti M, Abed YY, Beltrami G, Delcroix L, Manfrini M, et al. (2009) Biological reconstruction after resection of bone tumors of the proximal tibia using allograft shell and intramedullary free vascularized fibular graft: long-term results. Microsurgery 29(5): 361-372.

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